



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/483,317	01/14/2000	Bo-In Lin	L&C-9901	8217
7590	06/05/2009		EXAMINER	
Bo-In Lin 13445 Mandoli Drive Los Altos, CA 94022			RIES, LAURIE ANNE	
			ART UNIT	PAPER NUMBER
			2176	
			MAIL DATE	DELIVERY MODE
			06/05/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/483,317	<b>Applicant(s)</b> LIN, BO-IN
	<b>Examiner</b> LAURIE RIES	<b>Art Unit</b> 2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

**Status**

1) Responsive to communication(s) filed on 09 March 2009.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-21 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s).Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s).Mail Date \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

1. This action is responsive to communications: Amendment, filed 9 March 2009, to the Original Application, filed 14 January 2000.
2. Claims 1-21 are pending. Claims 1, 7, 13, and 19 are independent claims.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 7, and 13 recites the limitation "said name term" in lines 25, 21-22, and 11, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claims 2-6, 8-12, and 14-18 are dependent upon claims 1, 7, and 13, respectively, and are rejected for fully incorporating the deficiencies of the base claim(s) from which they depend.

***Claim Rejections -- 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rivette, et al. (U.S. Patent 5,991,780, with priority to November 19, 1993) [hereinafter “Rivette”], in view of Krause, et al. (U.S. Patent 5,625,827, filed December 23, 1994) [hereinafter “Krause”], and further in view of Applicant’s specification [hereinafter “specification”].**

**Regarding independent claim 1**, Rivette in view of Krause and further in view of specification teaches:

*A naming-term based and graphically aided document management and review processing system implemented in a computer comprising:  
a document reading processing module for reading a single document having textual descriptions and at least a drawing having at least a graphic element assigned and illustrated with an alpha-numeral designation and*

*described with said alpha-numeral designation designating a naming term in said textual descriptions, wherein said document reading processing module is further provided for converting said graphic element assigned with said alphanumerical designation and said textual descriptions to a plurality of processor-recognized elements and incorporating the textual descriptions and the number of processor-recognized elements in a single processor-recognizable file;;*

*a search and link processing module for searching within said single processor-recognizable file for linking said processor-recognized with said alpha-numeral designation with at least one associated segment of said textual descriptions including and describing said naming term designated by said alpha-numeral; and*

*a display processing module for displaying said drawing with said naming term as designated by said alpha-numeral designation and described in said at least one associated segment of said textual description wherein said name term is displayed immediately and directly next to said graphic element illustrated with said alpha-numeral designation assigned to said graphic element whereby a document reviewer can directly and graphically view and associate said graphic element together with said naming term.*

(See, Rivette, teaching a document reading means for reading a document having textual descriptions and at least a drawing having at least a graphic element assigned

with an alpha-numeral designation, wherein said document reading means is further provided for converting said graphic element with said alphanumerical-designation and said textual descriptions to a plurality of processor-recognized elements in fig. 9 and 10. Fig. 9 demonstrates how the documents arrive in electronic format from the Patent and Trademark Office and then in fig. 10 displays the process of converting the documents into process-recognized elements.

Rivette also teaches a search and link means for searching said processor-recognized elements and linking alpha-numeral designations with at least one associated segment of textual description including the alpha-numeral designation wherein the alpha-numeral designation linked to a naming term in the document in fig. 35 and 36, col. 3 lines 28-51, and col. 29 line 65 – col. 30 line 20. Rivette describes how the text and image files are synchronized to produce Equivalent Files. The files are the equivalent of the elements and synchronized is the equivalent of linking in the claimed invention. Applicant's specification in page 3 lines 6-9 further discloses that products for searching and linking text to graphic elements are commonly available in the market.

While Rivette does not teach expressly that the textual descriptions include describing said naming term designated by said alpha-numeral designation, Krause teaches textual descriptions included in a secondary document that describes said naming term, such as describing the naming term which is designated by said alpha numeral designation "A" (See Krause, Figure 5, element 65). Furthermore, it would have been obvious to do so, providing the benefit of allowing the user to obtain

additional information with regard to the naming term that may not be conveniently displayed on the initial display screen.

Rivette teaches the display of both graphics and associated text including the column and line numbers of said text on the screen immediately next to one another in both fig. 33, col. 3 line 66 to col. 4 line 5, and col. 4 lines 19-24. Fig. 33 shows and col. 4 lines 19-24 explains a patent image window immediately next to a window of associated text. What Rivette does not teach is each naming-term displayed immediately next to the graphic elements and the alpha-numeral designation assigned to each graphic element whereby a user can select an alpha-numeral designation or a naming term to display of the associated segment of textual description associated with said alpha-numeral designation or naming term.

Krause teaches each naming-term displayed immediately and directly next to the graphic elements in fig. 3-5 and col. 5 lines 7-18. See specifically Krause, Figure 5, showing a naming term, such as "building paper", for example, displayed immediately and directly next to said graphic element. The graphic elements and the text labels and text descriptions are all readily available to the user on one screen. Krause teaches in col. 5 lines 7-13 that both a name and label are placed upon the graphic at each of a plurality of hotspots. Furthermore, Krause teaches in fig. 3b that each hotspot has unique coordinates to uniquely identify each hotspot and consequently each graphic element identified by each hotspot is likewise uniquely identified by individual coordinates related to the location of the hotspot. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, said hotspot to display an

associated segment of textual description. Krause teaches that the hotspots annotate a primary document and link to a textual description in a secondary document. These documents could be document parts for example in a hierarchical compound document and thus the textual description invoked by the hotspot could be part of the same document as the graphical document containing the hotspot. Additionally Krause teaches that the naming term may be described in at least one associated segment of a textual description also displayed immediately and directly next to said graphic element (See Krause, Figure 6, showing naming term "1/A34" displayed with textual description "Soffit Section" immediately and directly next to a graphic element of a soffit section).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with Krause and teachings of Applicant's disclosure to have created the claimed invention. One of ordinary skill in the art would have taken the text of Rivette and used it to replace the numbered labels on the images, as is done in Krause, through the use of automatic link generation systems and techniques which Applicant's specification teaches were readily available in the market. It would have been obvious and desirable to make this modification such that the combined image and text information would have been easier to read.

As disclosed, a "naming term" is the element name which is identified by number in a patent drawing. See, disclosure, figure 4B, and page 8, lines 2-4 and 15-17. There are two specifications to the term "naming term" as used in the claims. Using claim 1 as an exemplar of the independent claims, the first use of "naming term" is within the specification of the search and link means for associating a "alpha-numeral designation"

with "textual descriptions" "wherein said alpha-numeral designation designating a naming term illustrated by said graphic element. See, claim 1. The first specification does not require search by the naming term. A naming term is merely what is designated by the alpha-numeral that is searched for. The first specification is expressly taught in Rivette, figure 36, element 502, and col. 29, line 65 through col. 30, line 29, teaching the element number search.

The second specification for a "naming term" is found in claim 1 in the last section which specifies a display means "for displaying said drawing with said naming term displayed immediately next to said graphic element illustrated with said alpha-numeral designation assigned to said graphic element whereby a document reviewer can directly and graphically view and associate said graphic element together with said naming term." See, Claim 1. This limitation is read by the Examiner as having been intended by the Applicant to mean that a graphic element, for example a bolt in the drawing of a mechanical device, is displayed next to the element number, for example "12," along with the "naming element," such as "bolt 12" with "bolt 12" appearing on the drawing rather than the usual designation of just "12."

It is noted that in the example immediately above, "bolt" is the same thing as "12." Displaying one or the other in association with a graphic fully identifies the graphic. Associating both the name "bolt" and the number "12" in association with the graphic is more informative, but essentially duplicative. This relationship is noted in support of the conclusion that it would have been obvious to one of ordinary skill in the art at the time of the invention to identify a graphic by either the name or the number or

both. The motivation for using both is for convenience is not having to look up the name associated with the number, or the number associated with the name. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the invention of Rivette, according to the teachings of Krause to display both a name and a number for a graphic item, as is specified in claim 1.)

While Rivette and Krause do not teach expressly incorporating the textual descriptions and the number of processor-recognized elements in a single processor-recognizable file, it was well known in the art at the time of the invention that various data may be combined into a single processor-recognizable file. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the textual descriptions and processor-recognizable elements of Rivette and Krause in a single file without changing the respective function of the references and yielding the predictable result of storing both the textual descriptions and the processor-recognizable elements. Furthermore, it would have been obvious to do so, providing the benefit of allowing the textual descriptions to be stored with the processor-recognizable elements, thus making future updates more easily manageable by allowing the developer to access only a single file requiring updates rather than multiple files.

**Regarding dependent claim 2,** Rivette teaches:

*The document management and review system of claim 1 wherein:*

*said search and link processing module for searching and linking said associated segment of textual description including and describing said alpha-numeral designation assigned to said graphic element further includes a document-location-finder processing module for locating a column number, a page number, and a line-range number for said associated segment of textual description in said single document; and said display processing module is further provided for displaying said column number, said page number, and said line-range number for said segment of textual description next to said alpha-numeral- designation with said naming term displayed immediately and directly next to said graphic element.*

(See, Rivette, teaching a document-location-finder from a search in col. 4 lines 24-34 and a column and line coordinates described in col. 16 lines 7-24. Rivette also teaches a display means for displaying the text which contains the original column and line information described in fig. 35 and 36, col. 2 lines 42-50, and col. 29 line 65 – col. 30 line 20. Rivette does not teach displaying this information next to the alpha-numeral- designation, naming term, and associated graphic element. Krause teaches displaying associated text immediately next to a graphic element identified by an alpha-number- designation and naming term in fig. 3-5 and col. 5 lines 7-18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with Krause such that it displays the location information of the text in the same manner as the claimed invention. Rivette is used for viewing patents and is

fully aware of column number, page number, and line-range information of textual segments and can provide this information to the user. This information would have been displayed next to the appropriate graphic element using the teaching of Krause.)

**Regarding dependent claim 3**, Rivette teaches:

*The document management and review system of claim 1 further comprising:*

*a user interface provided for allowing a user to input a user- selected naming-term to invoke said search and link processing module for searching within said single processor-recognizable file incorporating said single document for said user-selected naming-term to an associated segment of textual description including and describing said user selected naming term designated with an alpha-numeral designation linking said user-selected naming-term to an associated graphic element in said document and for displaying said associated segment of textual description immediately and directly next to art said associated graphic element whereby said document reviewer can directly and graphically view and associate said associated graphic element with said user selected naming-term simultaneously.*

(See, Rivette, teaching a graphical user interface in col. 3 lines 49-51 and a text search in col. 4 lines 24-34. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text next to an associated graphic element assigned with a naming term related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

**Regarding dependent claim 4,** Rivette teaches:

*The document management and review system implemented in the computer of claim 1 further comprising:*  
*a database for said single processor-recognizable file incorporating said single document for listing said alpha-numeral designation with said naming term and said at least one associated segment of said textual descriptions wherein said at least one associated segment of said textual*

*descriptions includes and describes said naming term designated by said alpha-numeral designation with said alpha-numeral designation-designating said naming term.*

(See, Rivette, teaching a user interface in col. 3 lines 49-51 and search and link in col. 4 lines 24-34. Rivette teaches the display of a graphic element linked with an associated text segment in col. 3 line 66 to col. 4 line 3. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text including a naming term related to the user selected naming term next to an associated graphic element. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

**Regarding dependent claim 5**, Rivette teaches:

*The document management and review system implemented in the computer of claim 2 further comprising:*

*a user interface provided for allowing a user to input a user-selected naming-term to invoke said search and link processing module for searching within said single processor-recognizable file incorporating said single document for said user-selected naming-term and for linking said user-selected naming-term to an associated segment of textual description including and describing a naming term related to said user selected naming term designated with an alpha-numeral designation linking to m~ an associated graphic element for displaying said associated segment of textual description and a column; or a page number, and a line-range number, in said single document, for said associated segment of textual description and at least a figure number of said associated graphic element.*

(See, Rivette, teaching a user interface for searching and linking and also displaying the location of a found text in col. 3 lines 49-51, col. 3 line 66 through col. 4 line 3, and in col. 4 lines 24-34. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette is used for viewing patents and is fully aware of column number, page number, and line-range information of textual segments and can provide this information to the user. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text and a naming term related to a user selected naming term next to an associated graphic element related to a user selected naming-term. Krause teaches in

col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

**Regarding dependent claim 6**, Rivette teaches:

*The document management and review system implemented in the computer of claim 2 further comprising:*

*a user interface provided for allowing a user to input a user- selected alpha-numeral designation to invoke said search and link processing module for searching within said single processor-recognizable file incorporating said single document for said user-selected alpha-numeral designation and for linking said user-selected alpha-numeral designation to an associated segment of textual description including and describing a naming term designated by said user-selected alpha-numeral in said document; and*

*said display processing module is further provided for displaying at least a drawing having a graphic element linked by said user-selected alpha- numeral designation for displaying with said naming term associated with*

*said user-selected alpha-numeral designation immediately next to said graphic element whereby said document reviewer can directly and graphically view said drawing with said user selected alpha-numeral designation simultaneously with said naming term disposed immediately and directly next to said graphic element.*

(See, Rivette, teaching a user interface for searching and linking a naming-term to associated text in col. 3 lines 49-51, col. 3 line 66 through col. 4 line 3, and col. 4 lines 24-34. Rivette also teaches a display for drawing a graphic element, its associated text, linked naming-term and said term's location in col. 2 lines 42-50 and col. 16 lines 7-24. Rivette does not teach displaying an alpha-numeral designation and naming term next to an associated graphic element. Krause does teach displaying a name, label, and text immediately next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the name, label, and text segment would have been displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

**Regarding independent claim 7,** Rivette teaches:

*A method of naming-term based and graphically aided document review and management comprising:*

- a) employing a document reading processing module for reading a single document having textual descriptions and at least a drawing having graphic element marked with an alpha-numeral designation;*
- b) converting said document including said graphic elements and said alpha-numeral-designation to a plurality of processor- recognized elements and incorporating said textual descriptions and said plurality of processor-recognizable elements into a single processor-recognizable file;*
- c) employing a search and link processing module for searching within said single processor-recognizable file for said processor- recognized elements and linking each of said alpha-numeral designation with at least one associated segment of textual description including and describing said naming term designated by said alpha-numeral in said at least one associated segment of textual description; and*
- d) displaying said drawing with said naming-term as designated by said alpha-numeral designation and described in said at least one associated alpha-numeral designation and described in said at least one associated segment of said textual description wherein said name term is displayed immediately and directly next to said graphic element marked by said alpha-numeral designation whereby a document reviewer can directly and*

*graphically view and associate said graphic element together with said naming term.*

(See, Rivette, teaching a document reading means for reading a document having textual descriptions and at least a drawing having at least a graphic element assigned with an alpha-numeral designation, wherein said document reading means is further provided for converting said graphic element with said alphanumerical-designation and said textual descriptions to a plurality of processor-recognized elements in fig. 9 and 10. Fig. 9 demonstrates how the documents arrive in electronic format from the Patent and Trademark Office and then in fig. 10 displays the process of converting the documents into process-recognized elements.

Rivette also teaches a search and link means for searching said processor-recognized elements and linking alpha-numeral designations with at least one associated segment of textual description including the alpha-numeral designation wherein the alpha-numeral designation linked to a naming term in the document in fig. 35 and 36, col. 3 lines 28-51, and col. 29 line 65 – col. 30 line 20. Rivette describes how the text and image files are synchronized to produce Equivalent Files. The files are the equivalent of the elements and synchronized is the equivalent of linking in the claimed invention. Applicant's specification in page 3 lines 6-9 further discloses that products for searching and linking text to graphic elements are commonly available in the market.

Rivette teaches the display of both graphics and associated text including the column and line numbers of said text on the screen immediately next to one another in

both fig. 33, col. 3 line 66 to col. 4 line 5, and col. 4 lines 19-24. Fig. 33 shows and col. 4 lines 19-24 explains a patent image window immediately next to a window of associated text. What Rivette does not teach is each naming-term displayed immediately next to the graphic elements and the alpha-numeral designation assigned to each graphic element whereby a user can select an alpha-numeral designation or a naming term to display of the associated segment of textual description associated with said alpha-numeral designation or naming term.

Krause teaches each naming-term displayed immediately and directly next to the graphic elements in fig. 3-5 and col. 5 lines 7-18. See specifically Krause, Figure 5, showing a naming term, such as "building paper", for example, displayed immediately and directly next to said graphic element. The graphic elements and the text labels and text descriptions are all readily available to the user on one screen. Krause teaches in col. 5 lines 7-13 that both a name and label are placed upon the graphic at each of a plurality of hotspots. Furthermore, Krause teaches in fig. 3b that each hotspot has unique coordinates to uniquely identify each hotspot and consequently each graphic element identified by each hotspot is likewise uniquely identified by individual coordinates related to the location of the hotspot. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, said hotspot to display an associated segment of textual description. Krause teaches that the hotspots annotate a primary document and link to a textual description in a secondary document. These documents could be document parts for example in a hierarchical compound document and thus the textual description invoked by the hotspot could be part of the same

document as the graphical document containing the hotspot. Additionally Krause teaches that the naming term may be described in at least one associated segment of a textual description also displayed immediately and directly next to said graphic element (See Krause, Figure 6, showing naming term "1/A34" displayed with textual description "Soffit Section" immediately and directly next to a graphic element of a soffit section).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with Krause and teachings of Applicant's disclosure to have created the claimed invention. One of ordinary skill in the art would have taken the text of Rivette and used it to replace the numbered labels on the images, as is done in Krause, through the use of automatic link generation systems and techniques which Applicant's specification teaches were readily available in the market. It would have been obvious and desirable to make this modification such that the combined image and text information would have been easier to read.

While Rivette does not teach expressly that the textual descriptions include describing said naming term designated by said alpha-numeral designation, Krause teaches textual descriptions included in a secondary document that describes said naming term, such as describing the naming term which is designated by said alpha numeral designation "A" (See Krause, Figure 5, element 65). Furthermore, it would have been obvious to do so, providing the benefit of allowing the user to obtain additional information with regard to the naming term that may not be conveniently displayed on the initial display screen.

As disclosed, a "naming term" is the element name which is identified by number in a patent drawing. See, disclosure, figure 4B, and page 8, lines 2-4 and 15-17. There are two specifications to the term "naming term" as used in the claims. Using claim 1 as an exemplar of the independent claims, the first use of "naming term" is within the specification of the search and link means for associating a "alpha-numeral designation" with "textual descriptions" "wherein said alpha-numeral designation designating a naming term illustrated by said graphic element. See, claim 1. The first specification does not require search by the naming term. A naming term is merely what is designated by the alpha-numeral that is searched for. The first specification is expressly taught in Rivette, figure 36, element 502, and col. 29, line 65 through col. 30, line 29, teaching the element number search.

The second specification for a "naming term" is found in claim 1 in the last section which specifies a display means "for displaying said drawing with said naming term displayed immediately next to said graphic element illustrated with said alpha-numeral designation assigned to said graphic element whereby a document reviewer can directly and graphically view and associate said graphic element together with said naming term." See, Claim 1. This limitation is read by the Examiner as having been intended by the Applicant to mean that a graphic element, for example a bolt in the drawing of a mechanical device, is displayed next to the element number, for example "12," along with the "naming element," such as "bolt 12" with "bolt 12" appearing on the drawing rather than the usual designation of just "12."

It is noted that in the example immediately above, "bolt" is the same thing as "12." Displaying one or the other in association with a graphic fully identifies the graphic. Associating both the name "bolt" and the number "12" in association with the graphic is more informative, but essentially duplicative. This relationship is noted in support of the conclusion that it would have been obvious to one of ordinary skill in the art at the time of the invention to identify a graphic by either the name or the number or both. The motivation for using both is for convenience is not having to look up the name associated with the number, or the number associated with the name. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the invention of Rivette, according to the teachings of Krause to display both a name and a number for a graphic item, as is specified in claim 7.)

While Rivette and Krause do not teach expressly incorporating the textual descriptions and the number of processor-recognized elements in a single processor-recognizable file, it was well known in the art at the time of the invention that various data may be combined into a single processor-recognizable file. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the textual descriptions and processor-recognizable elements of Rivette and Krause in a single file without changing the respective function of the references and yielding the predictable result of storing both the textual descriptions and the processor-recognizable elements. Furthermore, it would have been obvious to do so, providing the benefit of allowing the textual descriptions to be stored with the processor-recognizable elements, thus making future updates more easily manageable by

allowing the developer to access only a single file requiring updates rather than multiple files.

**Regarding dependent claim 8**, Rivette teaches:

*The method of document management of claim 7 wherein:*  
*said step c) further includes a step of employing a document- location- finder processing module for locating a column or page number, and a line-range number in said single document for said at least one associated segment of textual description; and*  
*said step d) of displaying said naming term immediately and directly next to said graphic elements further displaying said column or page number, and said line-range number in said single document for said segment of textual description for said graphic elements each displayed immediately and directly adjacent said naming term*

(See, Rivette, teaching a document-location-finder from a search in col. 4 lines 24-34 and a column and line coordinates described in col. 16 lines 7-24. Rivette also teaches a display means for displaying the text which contains the original column and line information described in col. 2 lines 42-50. Rivette does not teach displaying this information next to the alpha-numeral-designation, naming term, and associated graphic element. Krause teaches displaying associated text next to a graphic element identified by an alpha-number-designation and naming term in fig. 3-5 and col. 5 lines 7-18. It

would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with Krause such that it displays the location information of the text in the same manner as the claimed invention. Rivette is used for viewing patents and is fully aware of column number, page number, and line-range information of textual segments and can provide this information to the user. This information would have been displayed next to the appropriate graphic element using the teaching of Krause.)

**Regarding dependent claim 9**, Rivette teaches:

*The method of document management of claim 7 further comprising:*

*e) employing a user interface for allowing a user to input a user- selected naming-term to invoke said search and link processing module for searching within said single processor-recognizable file incorporating said single document for said user-selected naming-term and for linking said user-selected naming-term to an associated segment of textual description in said document that includes and describes said user selected naming term designated with an alpha- numeral designation linking to an associated graphic element for displaying said associated segment of textual description including said user selected naming term immediately and directly next to said associated graphic element.*

(See, Rivette, teaching a graphical user interface in col. 3 lines 49-51 and a text search in col. 4 lines 24-34. Rivette depicts this search in fig. 46. A search will obviously

generate a report to display the results to the user after the search has completed. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text including a user selected naming term next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

**Regarding dependent claim 10,** Rivette teaches:

*The method of document management of claim 7 further comprising:  
incorporating said alpha-numeral designation with said naming term and  
said at least one associated segment of said textual descriptions in a  
database wherein said naming term is linked to said at least one  
associated segment of textual description includes and describes said  
naming term designated by said alpha-numeral designation with said  
alpha-numeral designation.*

(See, Rivette, teaching a user interface in col. 3 lines 49-51 and search and link in col. 4 lines 24-34. Rivette teaches the display of a graphic element linked with an associated text segment in col. 3 line 66 to col. 4 line 3. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

**Regarding dependent claim 11,** Rivette teaches:

*The method of document management of claim 7 further comprising:*

*e) employing a user interface for allowing a user to input a user selected graphic element naming-term to invoke said search and link processing module for searching within said single processor-recognizable file incorporating said single document for said user-selected graphic element*

*and for linking said user selected graphic element naming-term to an associated segment of textual description that including and describing said user-selected graphic naming-term and for displaying said associated segment of textual description and a column or page number, and a line-range number in said single document for said associated segment of textual description immediately and directly next to a graphic element marked with said user-selected graphic element naming-term.*

(See, Rivette, teaching a user interface for searching and linking and also displaying the location of a found text in col. 3 lines 49-51, col. 3 line 66 through col. 4 line 3, and in col. 4 lines 24-34. Rivette depicts this search in fig. 35 and 36, fig. 46, and col. 29 line 65 – col. 30 line 20. A search will obviously generate a report to display the results to the user after the search has completed. Rivette is used for viewing patents and is fully aware of column number, page number, and line-range information of textual segments and can provide this information to the user. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have

been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

**Regarding dependent claim 12**, Rivette teaches:

*The method of document management of claim 7 further comprising:*

- e) *employing a user interface for allowing a user to input a user- selected naming-term to invoke said search and link processing module for searching within said single processor-recognizable file incorporating said single document for said user-selected naming-term and for linking said user-selected naming-term to an associated segment of textual description including and describing said user- selected naming-term designated by an alpha-numeral designation linking to an associated graphic element; and*
- f) *displaying at least a drawing and said associated graphic element including said user-selected naming-term immediately and directly next to said associated graphic element.*

(See, Rivette, teaching a user interface for searching and linking a naming-term to associated text in col. 3 lines 49-51, col. 3 line 66 through col. 4 line 3, and col. 4 lines 24-34. Rivette also teaches a display for drawing a graphic element, its associated text, linked naming-term and said term's location in col. 2 lines 42-50 and col. 16 lines 7-24. Rivette does not teach displaying an alpha-numeral designation and naming term next to an associated graphic element. Krause does teach displaying a name, label, and text

immediately next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the name, label, and text segment would have been displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

**Regarding independent claim 13**, Rivette teaches:

*A naming-term based and graphically aided document review and management system implemented in a computer for reading a single document having textual descriptions and at least a drawing consisted of graphic elements designated with graphic element designations associated with a naming term included and described in said textual description in said single document incorporated in a single processor-recognizable file, comprising:*

*a display processing module for displaying said drawing with said naming term as designated by said alpha-numeral designation and described in said at least one associated segment of said textual description wherein said name term is displayed immediately and directly next to said textual*

*description of said single document incorporated in said single processor-recognizable file whereby a document reviewer can directly and simultaneously view and associate said naming term as described in said textual description to said graphic element without requiring a processor to process multiple files.*

(See, Rivette, teaching a document reading means for reading a document having textual descriptions and at least a drawing having at least a graphic element assigned with an alpha-numeral designation, wherein said document reading means is further provided for converting said graphic element with said alphanumerical-designation and said textual descriptions to a plurality of processor-recognized elements in fig. 9 and 10. Fig. 9 demonstrates how the documents arrive in electronic format from the Patent and Trademark Office and then in fig. 10 displays the process of converting the documents into process-recognized elements.

Rivette also teaches a search and link means for searching said processor-recognized elements and linking alpha-numeral designations with at least one associated segment of textual description including the alpha-numeral designation wherein the alpha-numeral designation linked to a naming term in the document in fig. 35 and 36, col. 3 lines 28-51, and col. 29 line 65 – col. 30 line 20. Rivette describes how the text and image files are synchronized to produce Equivalent Files. The files are the equivalent of the elements and synchronized is the equivalent of linking in the claimed invention. Applicant's specification in page 3 lines 6-9 further discloses that

products for searching and linking text to graphic elements are commonly available in the market.

Rivette teaches the display of both graphics and associated text including the column and line numbers of said text on the screen immediately next to one another in both fig. 33, col. 3 line 66 to col. 4 line 5, and col. 4 lines 19-24. Fig. 33 shows and col. 4 lines 19-24 explains a patent image window immediately next to a window of associated text. What Rivette does not teach is each naming-term displayed immediately and directly next to the graphic elements and the alpha-numeral designation assigned to each graphic element whereby a user can select an alpha-numeral designation or a naming term to display of the associated segment of textual description associated with said alpha-numeral designation or naming term.

Krause teaches each naming-term displayed immediately and directly next to the graphic elements in fig. 3-5 and col. 5 lines 7-18. See specifically Krause, Figure 5, showing a naming term, such as "building paper", for example, displayed immediately and directly next to said graphic element. The graphic elements and the text labels and text descriptions are all readily available to the user on one screen. Krause teaches in col. 5 lines 7-13 that both a name and label are placed upon the graphic at each of a plurality of hotspots. Furthermore, Krause teaches in fig. 3b that each hotspot has unique coordinates to uniquely identify each hotspot and consequently each graphic element identified by each hotspot is likewise uniquely identified by individual coordinates related to the location of the hotspot. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, said hotspot to display an

associated segment of textual description. Krause teaches that the hotspots annotate a primary document and link to a textual description in a secondary document. These documents could be document parts for example in a hierarchical compound document and thus the textual description invoked by the hotspot could be part of the same document as the graphical document containing the hotspot. Additionally Krause teaches that the naming term may be described in at least one associated segment of a textual description also displayed immediately and directly next to said graphic element (See Krause, Figure 6, showing naming term "1/A34" displayed with textual description "Soffit Section" immediately and directly next to a graphic element of a soffit section).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with Krause and teachings of Applicant's disclosure to have created the claimed invention. One of ordinary skill in the art would have taken the text of Rivette and used it to replace the numbered labels on the images, as is done in Krause, through the use of automatic link generation systems and techniques which Applicant's specification teaches were readily available in the market. It would have been obvious and desirable to make this modification such that the combined image and text information would have been easier to read.

While Rivette does not teach expressly that the textual descriptions include describing said naming term designated by said alpha-numeral designation, Krause teaches textual descriptions included in a secondary document that describes said naming term, such as describing the naming term which is designated by said alpha numeral designation "A" (See Krause, Figure 5, element 65). Furthermore, it would

have been obvious to do so, providing the benefit of allowing the user to obtain additional information with regard to the naming term that may not be conveniently displayed on the initial display screen.

As disclosed, a “naming term” is the element name which is identified by number in a patent drawing. See, disclosure, figure 4B, and page 8, lines 2-4 and 15-17. There are two specifications to the term “naming term” as used in the claims. Using claim 1 as an exemplar of the independent claims, the first use of “naming term” is within the specification of the search and link means for associating a “alpha-numeral designation” with “textual descriptions” “wherein said alpha-numeral designation designating a naming term illustrated by said graphic element. See, claim 1. The first specification does not require search by the naming term. A naming term is merely what is designated by the alpha-numeral that is searched for. The first specification is expressly taught in Rivette, figure 36, element 502, and col. 29, line 65 through col. 30, line 29, teaching the element number search.

The second specification for a “naming term” is found in claim 1 in the last section which specifies a display means “for displaying said drawing with said naming term displayed immediately next to said graphic element illustrated with said alpha-numeral designation assigned to said graphic element whereby a document reviewer can directly and graphically view and associate said graphic element together with said naming term.” See, Claim 1. This limitation is read by the Examiner as having been intended by the Applicant to mean that a graphic element, for example a bolt in the drawing of a mechanical device, is displayed next to the element number, for example

"12," along with the "naming element," such as "bolt 12" with "bolt 12" appearing on the drawing rather than the usual designation of just "12."

It is noted that in the example immediately above, "bolt" is the same thing as "12." Displaying one or the other in association with a graphic fully identifies the graphic. Associating both the name "bolt" and the number "12" in association with the graphic is more informative, but essentially duplicative. This relationship is noted in support of the conclusion that it would have been obvious to one of ordinary skill in the art at the time of the invention to identify a graphic by either the name or the number or both. The motivation for using both is for convenience is not having to look up the name associated with the number, or the number associated with the name. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the invention of Rivette, according to the teachings of Krause to display both a name and a number for a graphic item, as is specified in claim 13.)

While Rivette and Krause do not teach expressly incorporating the textual descriptions and the number of processor-recognized elements in a single processor-recognizable file, it was well known in the art at the time of the invention that various data may be combined into a single processor-recognizable file. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the textual descriptions and processor-recognizable elements of Rivette and Krause in a single file without changing the respective function of the references and yielding the predictable result of storing both the textual descriptions and the processor-recognizable elements. Furthermore, it would have been obvious to do so, providing

the benefit of allowing the textual descriptions to be stored with the processor-recognizable elements, thus making future updates more easily manageable by allowing the developer to access only a single file requiring updates rather than multiple files.

**Regarding dependent claim 14, as amended**, Rivette teaches:

*The document review and management system of claim 13 wherein:  
said display processing module is further provided for displaying a column  
or page number, and a line-range number in said single document along  
with said segment of textual description immediately and directly next to  
said naming term in the drawing.*

(See, Rivette, teaching a document-location-finder from a search in col. 4 lines 24-34 and a column and line coordinates described in col. 16 lines 7-24. Rivette also teaches a display means for displaying the text which contains the original column and line information described in col. 2 lines 42-50. Rivette does not teach displaying this information next to the alpha-numeral-designation, naming term, and associated graphic element. Krause teaches displaying associated text immediately and directly next to a graphic element identified by an alpha-number-designation and naming term in fig. 3-5 and col. 5 lines 7-18. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, said hotspot to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the

invention was made to have modified Rivette with Krause such that it displays the location information of the text in the same manner as the claimed invention. Rivette is used for viewing patents and is fully aware of column number, page number, and line-range information of textual segments and can provide this information to the user. This information would have been displayed next to the appropriate graphic element using the teaching of Krause.0

**Regarding dependent claim 15, as amended,** Rivette teaches:

*The document review and management system implemented in a computer of claim 13 further comprising:*

*a user interface provided for allowing a user to input a user- selected naming-term for searching within said single processor-recognizable file for said user-selected naming term and for linking said user-selected naming-term to an associated segment of textual description including and describing said user-selected naming term and a figure number of an associated graphic element linked by said user-selected naming term for displaying said associated segment of textual description together with said figure number of said associate graphic element included in said drawing.*

(See, Rivette, teaching a graphical user interface in col. 3 lines 49-51 and a text search within a single document in col. 4 lines 24-34. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search

has completed. Rivette shows the results of a search in fig. 35, 36 and col. 29 line 65 – col. 30 line 20. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text within a single document immediately next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

**Regarding dependent claim 16,** Rivette teaches:

*The document review and management system implemented in a computer of claim 13 further comprising:*  
*a user interface provided for allowing a user to input a user- selected naming-term for searching within said single processor-recognizable file for said user-selected naming term and for linking said user-selected naming-term to an associated segment of textual description including and describing said user-selected naming term and an associated graphic element related to said user-selected naming-term for displaying said*

*user-selected naming-term together with said associated textual description immediately and directly next to said associated graphic element in said drawing.*

(See, Rivette, teaching a user interface in col. 3 lines 49-51 and search and link in col. 4 lines 24-34. Rivette teaches the display of a graphic element linked with an associated text segment in col. 3 line 66 to col. 4 line 3. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette shows the results of a search in fig. 35, 36 and col. 29 line 65 – col. 30 line 20. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text within a single document immediately and directly next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

**Regarding dependent claim 17, as amended,** Rivette teaches:

*The document review and management system implemented in a computer of claim 13 further comprising:*

*a user interface provided for allowing a user to input a user- selected naming-term for searching within said single processor-recognizable file for said user-selected naming term and for linking said user-selected naming-term to an associated segment of textual description including and describing said user-selected term and for displaying said naming term together with said drawing said associated segment of textual description with a column or page number, and a line-range number in said single document for said associated segment of textual description in said single document.*

(See, Rivette, teaching a user interface for searching and linking and also displaying the location of a found text in col. 3 lines 49-51, col. 3 line 66 through col. 4 line 3, and in col. 4 lines 24-34. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette is used for viewing patents and is fully aware of column number, page number, and line-range information of textual segments and can provide this information to the user. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text from a single document next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated

segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

**Regarding dependent claim 18**, Rivette teaches:

*The document and review management system implemented in a computer of claim 14 further comprising:*

*a user interface provided for allowing a user to input a user- selected naming-term for searching within said single processor-recognizable file for said user-selected naming term and for linking said user-selected naming-term to an associated segment of textual description including and describing said user-selected naming term and an associated graphic element in said drawing related to said user-selected naming-term; and said display processing module is further provided for displaying a drawing showing said associated graphic element with said associated segment of textual description and said column or page number, and said line-range number in said single document for said associated segment of textual description displayed immediately next to said graphic element.*

(See, Rivette, teaching a user interface for searching and linking a naming-term to associated text in col. 3 lines 49-51, col. 3 line 66 through col. 4 line 3, and col. 4 lines 24-34. Rivette also teaches a display for drawing a graphic element, its associated text, linked naming-term and said term's location in col. 2 lines 42-50 and col. 16 lines 7-24. Rivette does not teach displaying an alpha-numeral designation and naming term next to an associated graphic element. Krause does teach displaying a name, label, and text from a single document next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the name, label, and text segment would have been displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

**Regarding independent claim 19,** Rivette teaches:

*A method for reading and managing a single document having textual descriptions and at least a drawing consisted of graphic elements designated with an graphic element designation associated with a naming term included and described in one of said textual descriptions of said*

*single document incorporated in a single processor-recognizable file, comprising: employing a display processing module for displaying said drawing with said naming term included in said textual description displayed said naming term immediately and directly next to said graphic elements whereby a document reviewer can directly and simultaneously view and associate said naming term to said graphic element without requiring a processor to process multiple files.*

(See, Rivette, teaching a document reading means for reading a document having textual descriptions and at least a drawing having at least a graphic element assigned with an alpha-numeral designation, wherein said document reading means is further provided for converting said graphic element with said alphanumerical-designation and said textual descriptions to a plurality of processor-recognized elements in fig. 9 and 10. Fig. 9 demonstrates how the documents arrive in electronic format from the Patent and Trademark Office and then in fig. 10 displays the process of converting the documents into process-recognized elements.

Rivette also teaches a search and link means for searching said processor-recognized elements and linking alpha-numeral designations with at least one associated segment of textual description including the alpha-numeral designation wherein the alpha-numeral designation linked to a naming term in the document in fig. 35 and 36, col. 3 lines 28-51, and col. 29 line 65 – col. 30 line 20. Rivette describes how the text and image files are synchronized to produce Equivalent Files. The files are

the equivalent of the elements and synchronized is the equivalent of linking in the claimed invention. Applicant's specification in page 3 lines 6-9 further discloses that products for searching and linking text to graphic elements are commonly available in the market.

Rivette teaches the display of both graphics and associated text including the column and line numbers of said text on the screen immediately next to one another in both fig. 33, col. 3 line 66 to col. 4 line 5, and col. 4 lines 19-24. Fig. 33 shows and col. 4 lines 19-24 explains a patent image window immediately next to a window of associated text. What Rivette does not teach is each naming-term displayed immediately next to the graphic elements and the alpha-numeral designation assigned to each graphic element whereby a user can select an alpha-numeral designation or a naming term to display of the associated segment of textual description associated with said alpha-numeral designation or naming term.

Krause teaches each naming-term displayed immediately and directly next to the graphic elements in fig. 3-5 and col. 5 lines 7-18. See specifically Krause, Figure 5, showing a naming term, such as "building paper", for example, displayed immediately and directly next to said graphic element. The graphic elements and the text labels and text descriptions are all readily available to the user on one screen. Krause teaches in col. 5 lines 7-13 that both a name and label are placed upon the graphic at each of a plurality of hotspots. Furthermore, Krause teaches in fig. 3b that each hotspot has unique coordinates to uniquely identify each hotspot and consequently each graphic element identified by each hotspot is likewise uniquely identified by individual

coordinates related to the location of the hotspot. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, said hotspot to display an associated segment of textual description. Krause teaches that the hotspots annotate a primary document and link to a textual description in a secondary document. These documents could be document parts for example in a hierarchical compound document and thus the textual description invoked by the hotspot could be part of the same document as the graphical document containing the hotspot. Additionally Krause teaches that the naming term may be described in at least one associated segment of a textual description also displayed immediately and directly next to said graphic element (See Krause, Figure 6, showing naming term "1/A34" displayed with textual description "Soffit Section" immediately and directly next to a graphic element of a soffit section).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with Krause and teachings of Applicant's disclosure to have created the claimed invention. One of ordinary skill in the art would have taken the text of Rivette and used it to replace the numbered labels on the images, as is done in Krause, through the use of automatic link generation systems and techniques which Applicant's specification teaches were readily available in the market. It would have been obvious and desirable to make this modification such that the combined image and text information would have been easier to read.

While Rivette does not teach expressly that the textual descriptions include describing said naming term designated by said alpha-numeral designation, Krause teaches textual descriptions included in a secondary document that describes said

naming term, such as describing the naming term which is designated by said alpha numeral designation "A" (See Krause, Figure 5, element 65). Furthermore, it would have been obvious to do so, providing the benefit of allowing the user to obtain additional information with regard to the naming term that may not be conveniently displayed on the initial display screen.

As disclosed, a "naming term" is the element name which is identified by number in a patent drawing. See, disclosure, figure 4B, and page 8, lines 2-4 and 15-17. There are two specifications to the term "naming term" as used in the claims. Using claim 1 as an exemplar of the independent claims, the first use of "naming term" is within the specification of the search and link means for associating a "alpha-numeral designation" with "textual descriptions" "wherein said alpha-numeral designation designating a naming term illustrated by said graphic element. See, claim 1. The first specification does not require search by the naming term. A naming term is merely what is designated by the alpha-numeral that is searched for. The first specification is expressly taught in Rivette, figure 36, element 502, and col. 29, line 65 through col. 30, line 29, teaching the element number search.

The second specification for a "naming term" is found in claim 1 in the last section which specifies a display means "for displaying said drawing with said naming term displayed immediately next to said graphic element illustrated with said alpha-numeral designation assigned to said graphic element whereby a document reviewer can directly and graphically view and associate said graphic element together with said naming term." See, Claim 1. This limitation is read by the Examiner as having been

intended by the Applicant to mean that a graphic element, for example a bolt in the drawing of a mechanical device, is displayed next to the element number, for example "12," along with the "naming element," such as "bolt 12" with "bolt 12" appearing on the drawing rather than the usual designation of just "12."

It is noted that in the example immediately above, "bolt" is the same thing as "12." Displaying one or the other in association with a graphic fully identifies the graphic. Associating both the name "bolt" and the number "12" in association with the graphic is more informative, but essentially duplicative. This relationship is noted in support of the conclusion that it would have been obvious to one of ordinary skill in the art at the time of the invention to identify a graphic by either the name or the number or both. The motivation for using both is for convenience is not having to look up the name associated with the number, or the number associated with the name. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the invention of Rivette, according to the teachings of Krause to display both a name and a number for a graphic item, as is specified in claim 19.)

While Rivette and Krause do not teach expressly incorporating the textual descriptions and the number of processor-recognized elements in a single processor-recognizable file, it was well known in the art at the time of the invention that various data may be combined into a single processor-recognizable file. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the textual descriptions and processor-recognizable elements of Rivette and Krause in a single file without changing the respective function of the references and yielding the

predictable result of storing both the textual descriptions and the processor-recognizable elements. Furthermore, it would have been obvious to do so, providing the benefit of allowing the textual descriptions to be stored with the processor-recognizable elements, thus making future updates more easily manageable by allowing the developer to access only a single file requiring updates rather than multiple files.

**Regarding dependent claim 20,** Rivette teaches:

*The method of claim 19 wherein:*

*said step of displaying said drawing further comprising a step of displaying an associated segment of textual description including descriptions of said naming term for said designated graphic element immediately and directly next to said graphic elements an associated segment of textual description including descriptions of said naming term..*

(See, Rivette, teaching a display for drawing a graphic element, its associated text, and said text's location in col. 2 lines 42-50, col. 3 line 66 through col. 4 line 3, and col. 16 lines 7-24. Rivette does not teach displaying an alpha-numeral designation and naming term immediately next to an associated graphic element. Krause does teach displaying a name, label, and text from a single document next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an

associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the name, label, and text segment would have been displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

**Regarding dependent claim 21**, Rivette teaches:

*The method of claim 19 further comprising:  
employing a user interface for allowing a user to input a user- selected naming-term for searching within said single processor-recognizable file and for linking said user-selected naming-term to an associated segment of textual description including including descriptions of said user-selected naming term and for linking to an associated graphic element related to said user-selected naming term for displaying a drawing together with said associated segment of textual description said user-selected naming term immediately and directly next to said graphic element.*

(See, Rivette, teaching a graphical user interface in col. 3 lines 49-51 and a text search in col. 4 lines 24-34. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette does not teach displaying the resulting of the search immediately next to an associated graphic element related to the user selected naming-term. Krause does

teach displaying text from a single document immediately next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See, MPEP 2123.

***Response to Arguments***

5. Applicants' arguments filed 9 March 2009 have been fully considered, but they are not persuasive.

1) Applicant argues that Rivette in combination with Krause and Applicant's Specification teaches away from the claimed invention because the claimed invention is directed to a single document and Krause's discloses a system to correlate among many documents and files by naming file names and document names. A "teaching away" is prior art teaching that some element would not work in some respect. Applicant's arguments allege that Krause fails to teach or reasonably suggest the use of a single file. The Office respectfully disagrees. Krause clearly teaches that a detail page may have two or more detailed graphic drawings thereon, which will be uniquely handled, though the entire page is stored as a single file (See Krause, Column 4, lines 2-5, emphasis added).

Each of Applicant's following arguments posit that Krause fails to teach a "naming element." Each of the arguments cites to a different section of the Non-Final Office Action, which was filed on 8 September 2008, which is alleged as a deficiency in Krause failing to teach a "naming term," as follows:

2) Applicant argues that the Krause disclosure including the sections cited by the Examiner, the figures DO NOT show any NAMING TERMS at all. According to the Description of Krause on Column 9 lines 32 to 44 as copied in the followings: "As an example of the system, an elevational view is illustrated in FIGS. 4-5 as displayed on the display 14 with the function bar there-along. This may be considered the primary document which includes a north elevation view. Located on these drawings are four hotspots: A, B, C, and numbered hotspots. The "A" hotspot will call up a textual description which is in a note or text file named A in memory 30 as illustrated in FIG. 5. Subsequent activation of the hotspot "B" will call up the B file and display same in a cascade fashion on the computer screen as in FIG. 5. The B file may be a sectional view as is illustrated. Thereafter, each of these documents may be exited in order to return and display the full primary document as in FIG. 4. (Column 9, lines 32-44), "A", "B" and "C" are alpha numeral designations for a naming term "hot spot", but "hot spot" have never been displayed with any of the alpha-numeral designations. Therefore, Krause does not teach a display of "Naming Terms" directly and immediately next to the graphic element as directed by the invention now amended

3) Applicant argues that the alpha number designation 65 is described as "Window". Accordingly "Window" is a naming term for the designation "65" in Krause. But all the drawings of Kraus have not shown "WINDOW" directly and immediately next to the graphic element pointed by the alpha numeral designation "65".

- 4) Applicant argues that "Building Paper" is NOT a NAMING TERM because the term building paper has never assigned with any alpha numeral designation and the term "BUILDING PAPER" has never been described in the text of Krause's Specification.
- 5) Applicant argues that Figs. 3-5 (and all other figures of Krause) and all figures of Rivette have no naming terms directly and immediately displayed next to the graphic element.

The Office respectfully notes that variations of the same arguments by Applicant as listed above were presented in Applicant's response filed 28 August 2006 and addressed in the Office action filed 15 November 2006. Again, the Office respectfully disagrees. As disclosed by Applicant's Specification, a "naming term" is the element name which is identified by number in a patent drawing. See, Applicant's specification, figure 4B, and page 8, lines 2-4 and 15-17. There are two specifications to the term "naming term" as used in the claims. Using claim 1 as an exemplar of the independent claims, the first use of "naming term" is within the specification of the search and link means for associating a "alpha-numeral designation" with "textual descriptions" "wherein said alpha-numeral designation designating a naming term illustrated by said graphic element. See claim 1. The first specification does not require search by the naming term. A naming term is merely what is designated by the alpha-numeral that is searched for. The first specification is expressly taught in Rivette, figure 36, element 502, and col. 29, line 65 through col. 30, line 29, teaching the element number search. The second specification for a "naming term" is found in claim 1 in the last section which

specifies a display means "for displaying said drawing with said naming term as designated by said alpha-numeral designation and described in said at least one associated segment of said textual description wherein said name term is displayed immediately next to said graphic element illustrated with said alpha-numeral designation assigned to said graphic element whereby a document reviewer can directly and graphically view and associate said graphic element together with said naming term."

See, Claim 1, as amended. This limitation is read by the Examiner as having been intended by the Applicant to mean that a graphic element, for example a bolt in the drawing of a mechanical device, is displayed next to the element number, for example "12," along with the "naming element," such as "bolt 12" with "bolt 12" appearing on the drawing rather than the usual designation of just "12." It is noted that in the example immediately above, "bolt" is the same thing as "12." Displaying one or the other in association with a graphic fully identifies the graphic. Associating both the name "bolt" and the number "12" in association with the graphic is more informative, but essentially duplicative. This relationship is noted in support of the conclusion that it would have been obvious to one of ordinary skill in the art at the time of the invention to identify a graphic by either the name or the number or both. The motivation for using both is for convenience is not having to look up the name associated with the number, or the number associated with the name. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the invention of Rivette, according to the teachings of Krause to display both a name and a number for a graphic item, as is specified in claim 1.

Additionally, as previously noted by the Office, Krause teaches that a name is presented with a section of a drawing, such as “Building Paper” or “Fixed Base Clip”, etc, as taught by Krause in Figure 5, which is part of the Krause disclosure. These textual phrases identify the graphic elements to which they are associated and are displayed on the drawing immediately next to the graphic element to which they are associated, as clearly shown by Krause in Figure 5, as well as in Krause, Figure 6, which presents additional examples of textual phrases that identify graphic elements and that are displayed immediately next to the graphic elements they identify, such as, by way of example, “Soffit Section” (See Krause, Figure 6).

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Ries whose telephone number is 571-272-4095. The examiner can normally be reached on M-F, 6:00am-3:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Art Unit: 2176

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laurie Ries/  
Primary Examiner  
Technology Center 2100  
4 June 2009